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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : PCT Date: 1/10/01
GUTIERREZ et al :
PCT No.: PCT/FR01/00067 :
Filed: Concurrently Herewith :
For: USE OF...COMPOSITION :

600 Third Avenue
New York N.Y. 10016
August 31, 2001

PRELIMINARY AMENDMENT

Asst. Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend this application as follows:

IN THE SPECIFICATION:

Page 1, before line 1, insert

--This application is a 371 of PCT/FR01/00067 filed January
10, 2001.--

IN THE CLAIMS:

Cancel claim 1 and add the following claim:

--12. A method of maturation of Keratinocytes and amplifying
the synthesis of the cytokins and increase of the desmosomial
proteins in a warm-blooded animal which consists in applying on the
body of said warm-blooded animal an amount of a cosmetic
composition containing an extract of algae of the Dictyotales
family, effective for limiting the problems connected to ageing.--

Claim 2 (amended) The method of claim 12 wherein the active
extract is a product prepared after extraction from the algae and

purification by HPLC on grafted silica in C₁₈ of a raw extract, then elution by a mixture of methanol/water to isolate an active fraction processing a period of retention of between 9 and 12 minutes.

Claim 3 (amended) The method of claim 12 wherein the active principle results from an ethanol or acetone extract of the alga *Padona pavonica*.

Claim 4 (amended) The method of claim 3 wherein the extract of *Padona pavonica* is evaporated until dry and then dispersed in a liquid or solid inert support, and diluted in a liquid or solid inert support.

Claim 5 (amended) The method of claim 4 wherein the extract of *Padina pavonica* is incorporated into a support or vehicle appropriate for topical preparations in an oily phase, or dry.

Claim 6 (amended) The method of claim 3 wherein the extract of *Padina pavonica* is incorporated into a solution of polyethylene glycol containing a dispersant or a surfactant, and in which a silicone oil is added to the solution by produce a fluid emulsion.

Claim 7 (amended) The method of claim 12 wherein the active principle content is 0.1 to 200 g per kg of the composition.

Claim 8 (amended) The method of claim 12 wherein the active principle content is 4 to 150 g per kg of the composition.

Claim 9 (amended) The method of claim 12 wherein the concentration of extract of algae is up to 200,000 Units (UA) per liter.

Claim 10 (amended) The method of claim 3 wherein the Padina pavonica extract content is 20 to 80,000 Unites of activity (UA) per kg of active principle on a support, per kg of final topical composition.

Claim 11 (amended) The method of claim 12 wherein a culture media is used to increase the maturation of Keratinocytes.

REMARKS

The amendment is presented to insert reference to the PCT application and to conform the claims to the American practice.

Respectfully submitted,
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CAM:ds
Enclosures

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MARKED UP VERSION OF PAGE 1 OF SPECIFICATION**USE OF DICTYOTAL EXTRACTS IN THE PRODUCTION
OF A TOPICAL COMPOSITION**

Insert
-- This application is a 371 of PCT/FR01/00067 filed January 10, 2001.--

The present invention relates to the field of cosmetology and more especially to a new agent and new formulations intended for cosmetic purposes.

More especially it has as its aim new topical compositions containing an extract of algae, which have the property of activating the maturation of Keratinocytes.

Its specific aim is the use of a preparation based on extracts of an alga from the Dictyotales family with a view to producing a topical composition, intended for cosmetic purposes, bringing about the maturation of Keratinocytes with amplification of the synthesis of the cytokeratins, particularly cytokeratins CK1 and CK10, and the increase of desmosomal proteins to contribute to the consolidation of the stratified structure of the epidermis

This extract of alga neither increases proliferation nor entails excessive ageing of the cells, and does not act on the cellular metabolism of the cells of human skin.

The epidermis which represents the surface section of the skin is formed from a succession of several layers of keratinocytes that are differentiated to a greater or lesser extent.

Thus, at the level of the basal layer, keratinocytes are found, which are small in size but have a great capacity for proliferation. Above this layer, there are several suprabasal layers made up of keratinocytes that are matured or developed, then differentiated as a function of their selective migration from the basal layer.

This stratified structure of the suprabasal layers of the epidermis can be modulated by several factors and particularly by soluble or ionic calcium – as opposed to fixed calcium: in the presence of calcium in a sufficient quantity, a stimulation of the synthesis of the cytoskeleton is observed and particularly of the cytokeratins, and of

CLAIMS

1. Use of a preparation based on an extract of algae of the Dictyotales family, with a view of producing a topical composition intended for cosmetic purposes, with a view to the maturation of Keratinocytes, with amplification of the synthesis of the cytokins and increase of the desmosomal proteins.
2. ~~The method of~~ Use of a preparation on a basis of extract of algae of the Dictyotales family, according to claim 1, ^{wherein} characterized in that the active ^{extract} principle is a product prepared after extraction from the algae and purification by HPLC on grafted silica in C₁₈ of a raw extract, then elution by a mixture of methanol/water, to isolate an active fraction possessing a period of retention of between 9 and 12 minutes.
3. ~~The method of~~ Use of a preparation according to claim 1, ^{12 wherein} in which the active principle results from an ethanol or acetone extract of the alga Padina pavonica.
4. ~~The method of~~ Use of a preparation according to claim 1 ^B or claim 2, in which the extract of Padina pavonica is evaporated until dry and then dispersed in a liquid or solid inert support, and diluted in a liquid or solid inert support.
5. ~~The method of claim 4 wherein~~ Use of a preparation according to claim 1 or claim 2, in which the extract of Padina pavonica is incorporated into a support or vehicle appropriate ~~to the~~ ^{for} achievement of topical preparations in an oily or aqueous phase, or dry, ~~such as~~ ~~creams, suspensions, emulsions, gels, ointments or powder.~~
6. ~~The method of claim 3 wherein~~ Use of a composition according to claim 1 or claim 2, in which the extract of Padina pavonica is incorporated into a solution of polyethylene glycol containing a dispersant or a surfactant, and in which a silicone oil is added to the solution to produce a fluid emulsion.
7. ~~The method of~~ Use of a preparation with a base of extract of algae of the Dictyotales family according to claim 1, ^{12 wherein} in which the active principle content ¹⁵ ranges from 0.1 to 200 g per kg of ^{The composition} preparation.

- The method of*
8. ~~Use of a preparation based on an extract of algae of the Dictyotales family according to claim 1 or claim 2, in which the active principle content ranges from 4 to 150 g per kg of preparation.~~
^{12 in kg}
^{is}
^{the composition}
- The method of*
9. ~~Use of a preparation based on an extract of algae of the Dictyotales family according to claim 1 or claim 2, in which the concentration of extract of algae is dosed in activity to 200,000 Units (UA) per litre.~~
^{12 in kg}
^{is up}
- The method of*
10. ~~Use of a preparation based on an extract of algae of the Dictyotales family according to claim 1 or claim 2, in which the Padina pavonica extract content ranges from 20 to 80,000 Units of activity (UA) per kg of active principle on a support, per kg of final topical preparation.~~
^{3 when}
^{is}
^{composition}
- The method of*
11. ~~Use of a preparation based on an extract of algae of the Dictyotales family according to claim 1 or claim 2, in culture media, to increase the maturation of Keratinocytes.~~
^{12 when}
^{is used}